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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/739,224	12/19/2003	Tetsuya Takeshita	118106	8470

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EXAMINER

JERABEK, KELLY L

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/739,224

Applicant(s)

TAKESHITA, TETSUYA

Examiner

Kelly L. Jerabek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda US 2003/0058351 in view of Minakuti et al. US 2003/0076424.

Re claim 1, Maeda discloses an electronic still camera comprising: an image-pickup part (CCD 5) for capturing an image of light passing through a photo-taking lens (1) to generate color image data (figure 1; page 2, paragraph 19); an ambient light colorimetric part (20) for measuring color of ambient light without passing through the photo-taking lens (1) (page 2, paragraph 22); a colorimetric calculation part (22) for

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obtaining a colorimetric result from the ambient light colorimetric part (20) in synchronization with colorimetric timing, and for calculating and storing color gain (Ts) that brings the colorimetric result near to an achromatic color (white); and a white balance adjustment part (17) for carrying out white balance adjustment of the image data with the use of the color gain (Ts) stored in the colorimetric calculation part (page 2, paragraph 26-page 3, paragraph 36). However, although the Maeda reference discloses a digital camera including an ambient light colorimetric sensor including all of the above limitations, it fails to specifically state that the camera includes an operation member for receiving an instruction for a colorimetric timing of the ambient light from a user.

Minakuti et al. discloses a digital camera and a colorimeter capable of transmitting a color component value to the digital camera. Minakuti states that the colorimeter (2) includes a colorimetric switch (27) that may be pressed by a user in order to activate a colorimetric sensor (24), detect a color component value of incident light and subsequently transmit the color component value to the digital camera (1) so that the camera may perform white balance correction (Page 5, paragraph 93-page 6, paragraph 114). Therefore, it would have been obvious for one skilled in the art to have been motivated to include a user-actuable colorimetric switch as disclosed by Minakuti in the digital still camera including an ambient light colorimetric sensor disclosed by Maeda. Doing so would provide a means for allowing a user of a camera including a colorimetric sensor to press a button in order to activate the colorimetric sensor and initiate an effective white balance correction.

Re claim 2, Maeda states that the colorimetric calculation part holds a difference in spectral characteristics between the image pickup part (CCD 5) and the ambient light colorimetric part (20) as correction data, to correct an error occurring in the white balance adjustment in accordance with the correction data (if achromatic data extracted from an image stored in memory does not reach a predetermined amount, external measurement data is supplied to the image processor (22) in order to correct the color temperature obtained from the image data) (page 2, paragraph 26-page 3, paragraph 36).

Re claim 3, the combination of the Maeda and Minakuti references discloses all of the limitations of claim 1 above. However, although Maeda discloses a colorimetric calculation part (22) for obtaining a colorimetric result from an ambient light colorimetric part (20) and for calculating an storing color gain and bringing the colorimetric result near to achromatic color it fails to state that the colorimetric calculation part pre-stores respective correspondence relations between a colorimetric result of ambient light and an applicability of white balance adjustment carried out based on the colorimetric result, and when the colorimetric result from the ambient light colorimetric part turns out to be inadequate, the colorimetric calculation part gives a warning which indicates that the ambient light is inadequate to the white balance adjustment.

The digital camera and colorimeter system disclosed by Minakuti states that a difference between the color indicated by the colorimeter color component value and

the color indicated by the incident light color component value is compared with a threshold which is predetermined by measurement and when the color difference is equal or larger than the predetermined threshold, a warning is displayed so that the colorimeter color component value is not used in white balance correction (Page 6, paragraphs 112-115). Therefore, it would have been obvious for one skilled in the art to have been motivated to enable the colorimetric calculation part disclosed by Maeda to pre-store a threshold value and provide a warning indication as disclosed by the Minakuti reference. Doing so would provide a means for preventing color correction from being improperly performed (Minakuti: page 6, paragraph 116).

Re claims 4-5, the combination of the Maeda and Minakuti references discloses all of the limitations of claim 1 above. Additionally, the image sensor (CCD 5) serves as a TTL photometric part and a TTL colorimetric part that measures the luminance and color of light incident on the image pickup part. However, although Maeda discloses a colorimetric calculation part (22) for obtaining a colorimetric result from an ambient light colorimetric part (20) and for calculating an storing color gain and bringing the colorimetric result near to achromatic color it fails to state that when the colorimetric result from the ambient light colorimetric part turns out to be inadequate, the colorimetric calculation part gives a warning which indicates that the ambient light is inadequate to the white balance adjustment.

The digital camera and colorimeter system disclosed by Minakuti states that a difference between the color indicated by the colorimeter color component value and

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the color indicated by the incident light color component value is compared with a threshold which is predetermined by a measurement and when the color difference is equal or larger than the predetermined threshold a warning is displayed so that the colorimeter color component value is not used in white balance correction (Page 6, paragraphs 112-115). Therefore, it would have been obvious for one skilled in the art to have been motivated to enable the colorimetric calculation part disclosed by Maeda provide a warning indication as disclosed by the Minakuti reference. Doing so would provide a means for preventing color correction from being improperly performed (Minakuti: page 6, paragraph 116).

Re claim 6, Maeda states that color temperature information T_s of the calorimetric sensor (20) and the color temperature information T_w calculated from the image data are weighted and a white balance control value is calculated on the basis of the weighted color temperature information (page 3, paragraphs 34-40). Thus, the weight applied to color temperature information T_s of the calorimetric sensor (20) will vary according to the color temperature information T_w calculated from the image data. Therefore, it can be seen that the colorimetric calculation part (22) obtains a plurality of colorimetric results (corresponding to the different applied weights) of the ambient light from the ambient light colorimetric part (20) to calculate an average value of the plurality of colorimetric results and obtains a color gain for white balance adjustment based on the average value of the colorimetric results.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Furukawa (US 2003/0081140) discloses an image sensing apparatus capable of performing white balance correction. The information regarding a colorimetric sensor and white balance correction is relevant material.

Takeshita (US 2002/0106206) discloses an image-capturing device. The information regarding white balance correction is relevant material.

Okino (US 5,617,139) discloses an image pickup apparatus. The information regarding white balance correction is relevant material.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is **(571) 272-7312**. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on **(571) 272-7304**. The fax phone

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number for submitting all Official communications is (703) 872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at (571) 273-7312.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KLJ



TUAN HO
PRIMARY EXAMINER